

REMARKS

Claims 1-13 and claims 15-48 were pending in the present application. Claims 5, 16-20, 28, 32-48 are cancelled herein.

Firstly, Applicants would like to thank the Examiner for taking the time to speak with Applicants' attorney by telephone with regard to the present case. Pursuant to this telephone interview, Applicants hereby submit a terminal disclaimer over co-pending U.S. Patent Application Serial No. 09/696,834. Both the present application and the cited co-pending application were, at the time of filing, owned by common assignee, Akzo Nobel, N.V.

Also, pursuant to the telephone interview between Applicants' attorney and the Examiner, claim 5 has been incorporated into claim 1. The anionic polymer described in claim 5 has also been incorporated into claims 22 and 27.

In the Office Action, claims 1-13, 15-48 are rejected under 35 U.S.C. 103(a) as being anticipated by Jonsson in "Advanced Water Recycling System Required For New South African Mill", or Panchapakesan in "Closure of Mill Whitewater Systems Reduces Water Use, Conserves Energy", or Guss in "Closed Water Systems in Mills Using Secondary Fiber" and Hoffman et al. (US Patent No. 6,071,380) in view of Nagarajan et al. (EP 0805234) further evidenced by Satterfield et al. (U.S. Patent No. 5,755,930). This rejection is respectfully traversed.

The Jonsson, Guss, Panchapakesan and Hoffman references describe the closure of paper mills but do not teach, suggest or disclosure that closure leads to high conductivity in the cellulosic suspension. As previously explained, high conductivities in the suspension is due to the salt content of the suspension. These references also do not disclose the cationic polymers claimed in the present invention.

Satterfield discloses improved retention at “dirty” suspensions, which might be caused by recirculation of whitewater. A high conductivity is also disclosed. However, Satterfield is also completely silent with regard to using a cationic organic polymer having an aromatic group.

Nagarajan relates to a paper making process that comprises adding to a cellulosic suspension a dispersion polymer and microparticles. The polymer can be a cationic polymer with an aromatic group or a non-aromatic polymer. In example 2 of Nagarajan it is shown that the **non-aromatic cationic polymer** gives **better retention** compared to the aromatic cationic polymer. This is also confirmed by the examples of the present invention. At low conductivities, 0.47 and 1.375 mS/cm (ex. 1 and 2), the performance of the non-aromatic cationic polymer is better than the aromatic cationic polymer. However, the present invention has unexpectedly found that at higher conductivities, i.e, 2.4 and 2.5 (ex. 7 and ex. 8) and 5.5-10mS/cm (ex. 3) the relationship is the opposite and the aromatic cationic polymer shows both better retention and dewatering effect.

One of ordinary skill in the art with the aim to improve retention when using a high conductivity stock, absent any teaching, disclosure or suggestion that a particular polymer is better for such stock, would be motivated to choose the polymer with the best performance known in the prior art. As has been described above, Nagarajan teaches that the non-aromatic cationic polymer gives the best retention. Thus, Nagarajan actually teaches away from the claims of the present application and there is no teaching, suggestion or disclosure to motivate the skilled person to use the non-preferred polymer of Nagarajan to improve retention in a high conductivity stock. There is nothing in the cited prior art that would lead a person of ordinary skill to choose a polymer that does not give the best performance solely because a high conductivity stock is used.

There is nothing in the prior art showing that one of ordinary skill in the art would be able to foresee the difference in performance between the non-aromatic and

aromatic cationic polymer at high conductivity stocks. Applicants submit that only applicant's disclosure provides any motivation for combining the isolated disclosures of the cited references in the manner combined in the Office Action.

The Applicants respectfully request that the Examiner reconsider the rejection of claims and find the claims in condition for immediate allowance.

Respectfully submitted,

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